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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/593,178	06/13/2000	Veselin Brankovic	450103-02669	5448
20999	7590	10/15/2004	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			TRINH, SONNY	
			ART UNIT	PAPER NUMBER
			2687	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/593,178

Applicant(s)

BRANKOVIC ET AL.

Examiner

Sonny TRINH

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-33, 52-55, 57-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-33 is/are allowed.
- 6) ☒ Claim(s) 52-55 and 57-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 52-55, 57, 59-60 have been considered but are moot in view of the new ground(s) of rejection.

Regarding **claim 58**, in response to Applicant's challenge the correctness of the assertion in the Official Notice taken by the Examiner about "the use of 60 GHz frequency range for high bit rate data transmission", the Examiner hereby cites the U.S. Patent Number 5,770,304 granted to Nakamura et al. (see column 1) in support for the Official Notice taken about the use of 60 GHz frequency range for high bit rate data transmission. The rejection of claim 58 remains unchanged and is repeated below.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 52, 55, 57-58** are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese Patent Application by NEC (herein after "NEC" JPO 09233093A, please see attached Machine Assisted Translation (MAT)).

Regarding **claim 52**, the NEC document discloses a wireless transmission system (figure 3, claims 1, 2) comprising a fixed hub (figure 3, fixed hub 103) connected to an information source (inherent), said fixed hub provided with a wide angle beam antenna (paragraph 0009); and user terminal provided with narrow beam antenna (abstract, figure 3); wherein content from said information source is downloaded to said user terminal via said fixed hub (inherent) within only a small localized area of said fixed hub (figure 3, the position of the base station on the ceiling indicates that this is a small localized area). The NEC document also discloses that said fixed hub is one of a plurality of fixed hubs (figure 3, more than one fixed hub 103 is shown). Furthermore, the NEC document does not disclose any hand-over between fixed hubs.

However, the NEC document does not explicitly disclose that the user terminal is a hand held mobile terminal. However, wireless LANs have been known to provide wireless connection to mobile hand held devices such as mobile telephone and it would have been obvious and well within the level of a person of ordinary skill in the art at the time of the invention to expand the capabilities of the WLAN to communicate with mobile station as well.

Regarding **claim 55**, the NEC document discloses the invention but does not explicitly disclose that the small localized area is within 20 meters of said fixed hub. It would have been an obvious matter of design choice to reduce the localized area to within 20 meters of the hub, since such a modification would have involved a mere change in the power of the transmission equipment. A change in size is generally recognized as being within the level of ordinary skill in the art.

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Regarding **claim 57**, since the NEC document is about a WLAN, it is inherent that said fixed hub is adapted to upload information from said mobile terminal.

Regarding **claim 58**, the NEC document teaches the invention but does not disclose that the system is designed for the transmission of data in the 60 GHz range. However the use of the 60 GHz frequency range for high bit rate data transmission is well known and widely used in Europe and also in Japan for its unlicensed requirement and the Examiner takes Official Notice of such high bit rate (60 GHz.). The motivation for using the 60 GHz. bit rate is for high speed data transmission that do not require any license.

3. **Claims 53-54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application by NEC (herein after "NEC" JPO 09233093A, please see attached Machine Assisted Translation (MAT)) in view of Fischer et al. (Fischer; U.S. Patent Number 6,360,075).

As to **claim 53**, the NEC document discloses the invention except for the fixed hub is provided with an antenna with a kidney shaped in cross section. In an analogous art, Fischer teaches the system and method for transmitting data. Fischer further teaches the hub is provided with an antenna with a kidney shaped in cross section ("cardioid" column 4 line 51 to column 5 line 9).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of the NEC, the kidney shaped antenna, as taught by Fischer to reduce potential interference between transmissions from subscribers and transmissions to central hub (see cited passage).

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As to **claim 54**, the NEC discloses that the antenna is mounted on a ceiling (abstract, figure 3), however, the combination of the NEC and Fischer does not disclose that said kidney shape beam has a local minimum level in said cross section in a direction opposing said ceiling. However, this claim merely add the intention of using the system in various environments and are obvious to one of ordinary skill in the art.

4. **Claims 59-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application by NEC (herein after "NEC" JPO 09233093A, please see attached Machine Assisted Translation (MAT)) in view of Kawamoto et al. ("Kawamoto"; U.S. Patent Number 6,341,133).

As to **claim 59**, the NEC document discloses the invention except for said information source is a broadband data highway including video contents. In an analogous art, Kawamoto teaches an information providing apparatus and portable communication terminal to receive multimedia / broadband information (column 2 lines 55 to column 3 line 28, claims 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system disclosed by NEC, the broadband/multimedia, as taught by Kawamoto so that the user can enjoy the rich information (multimedia/broadband) afforded by the broadband (bandwidth) taught by Kawamoto.

Regarding **claim 60**, Kawamoto further teaches that said contents includes contents of news information centers (column 14, specifically lines 22-40).

***Allowable Subject Matter***

5. **Claims 22-33** were allowed by the previous Office action (paper number 16).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 703-305-1961. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester KINCAID can be reached on 703-306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**SONNYTRINH**  
**PRIMARY EXAMINER**

4-Oct-04